CATALOGUE

OF THE

University of North Carolina,

AT

CHAPEL HILL.

NINETY-FIRST YEAR.

1885-'86.



RALEIGH:

EDWARDS, BROUGHTON & CO., POWER PRINTERS AND BINDERS.

1886.

CALENDAR.

CURRENT ACADEMIC YEAR, (1885–'86.)

1885.

Aug. 27. Beginning of Session.
Aug. 27–29. Examination of Applicants for Admission.
Oct. 12. ANNIVERSARY OF THE FOUNDATION OF THE UNIVERSITY.
Nov. 27. Thanksgiving.
Dec. 22. End of First Term.

1886.

Jan. 4. Beginning of Second Term.
Feb. 22. WASHINGTON'S BIRTHDAY.
May 1 and 3. Examination of Applicants for Admission.
June 1. Meetings of the two Literary Societies.
June 2. Address before the Literary Societies; Baccalaureate Sermon; Addresses by the Society Representatives.
June 3. COMMENCEMENT DAY.

NEXT ACADEMIC YEAR, (1886–'87.)

1886.

Aug. 26. Beginning of Session.
Aug. 26–28. Examination of Applicants for Admission.

BOARD OF TRUSTEES.

His Excellency, ALFRED M. SCALES, *Governor and President ex-officio.*
Hon. WM. L. SAUNDERS, ... *Secretary.*

TERM EXPIRES NOV. 30, 1887.

Rev. A. D. Betts, ... N. C. Conference.
Hon. R. R. Bridgers, ... New Hanover.
Hon. Ralph P. Buxton, ... Cumberland.
Hon. George Davis, LL. D., ... New Hanover.
Hon. W. T. Faircloth, ... Wayne.
N. P. Foard, Esq., ... Surry.
Hon. John A. Gilmer, ... Guilford.
Maj. John W. Graham, ... Orange.
H. A. Gudger, Esq., ... Buncombe.
F. M. Johnston, Esq., ... Davie.
Hon. James M. Leach, ... Davidson.
Hon. John Manning, LL. D., ... Orange.
D. P. McEachern, Esq., ... Robeson.
R. B. Peebles, Esq., ... Northampton.
Hon. James L. Robinson, ... Macon.
W. J. Yates, Esq., ... Mecklenburg.

TERM EXPIRES NOV. 30, 1889.

Hon. C. M. Cooke, ... Franklin.
Hon. J. J. Davis, ... Franklin.
Col. G. N. Folk, ... Caldwell.
Eugene Grissom, M. D., LL. D., ... Wake.
Kerr Craige, Esq., ... Rowan.
C. W. Hollowell, Esq., ... Pasquotank.
Rev. Neill McKay, D. D., ... Harnett.
James M. Mullen, Esq., ... Halifax.
Col. H. B. Short, ... Columbus.
Hon. W. L. Steele, ... Richmond.
Rev. J. L. Stewart, ... Sampson.

Col. S. McD. Tate,.....Burke.
Hon. C. R. Thomas,.....Craven.
Hon. R. B. Vance,.....Buncombe.
Joseph Williams, Esq.,.....Yadkin.
Rev. N. H. D. Wilson, D. D.,.....Guilford.

TERM EXPIRES NOV. 30, 1891.

Hon. Kemp P. Battle, LL. D.,.....Orange.
James S. Battle, Esq.,.....Nash.
Robert S. Beall, M. D.,.....Caldwell.
Charles W. Broadfoot, Esq.,.....Cumberland.
Henry R. Bryan, Esq.,.....Craven.
Hon. Paul C. Cameron,.....Orange.
Maj. John D. Cameron,.....Buncombe.
E. Hayne Davis, Esq.,.....Iredell.
Benjamin F. Grady, Esq.,.....Duplin.
Wm. J. Hawkins, M. D.,.....Wake.
Hon. Thomas S. Kenan,.....Wilson.
William N. Mebane, Esq.,.....Rockingham.
A. Haywood Merritt, Esq.,.....Chatham.
Col. James T. Morehead,.....Guilford.
Hon. Zebulon B. Vance, LL. D.,.....Mecklenburg.
Rev. Calvin H. Wiley, D. D.,.....Forsyth.

TERM EXPIRES NOV. 30, 1893.

Col. A. B. Andrews,.....Wake.
Richard H. Battle, Esq.,.....Wake.
Joseph A. Bitting, Esq.....Forsyth.
Julian S. Carr, Esq.,.....Durham.
William H. Day, Esq.,.....Halifax.
Col. John M. Galloway,.....Rockingham.
William E. Hill, Esq.,.....Duplin.
James H. Horner, Esq.,.....Granville.
Hon. George Howard,.....Edgecombe.
Hon. Montford McGehee,.....Person.
Col. Paul B. Means,.....Cabarrus.
Lee S. Overman, Esq.,.....Rowan.
James Parker, Esq.,.....Gates.
Hon. Charles Price,.....Rowan.
Rev. Thomas H. Pritchard, D. D.,.....New Hanover.
Hon. John C. Scarborough,.....Johnston.

ADDITIONAL TRUSTEES.

To be by law "from points conveniently accessible to the Seat of Government and the University."

TERM EXPIRES NOV. 30, 1887.

Col. W. H. S. Burgwyn,.....Vance.
Hon. Thomas M. Holt,.....Alamance.
Rev. D. A. Long,.....Alamance.
George Williams, Esq.,.....Caswell.

TERM EXPIRES NOV. 30, 1889.

James A. Graham, Esq.,.....Alamance.
Hon. Thomas J. Jarvis,.....Pitt.
Isaac R. Strayhorn, Esq.,.....Orange.
Hon. George V. Strong,.....Wake.

TERM EXPIRES NOV. 30, 1891.

Fabius H. Busbee, Esq.,.....Wake.
W. W. Lenoir, Esq.,.....Watauga.
J. Edwin Moore, Esq.,.....Martin.
Hon. Wm. L. Saunders,.....Wake.

TERM EXPIRES NOV. 30, 1893.

Wm. H. Chadbourn, Esq.,.....New Hanover.
A. M. Lewis, Esq.,.....Wake.
Thomas W. Mason, Esq..,.....Northampton.
John E. Woodard, Esq.,.....Wilson.

EXECUTIVE COMMITTEE.

His Excellency, ALFRED M. SCALES, Chairman *ex-officio.*
Hon. PAUL C. CAMERON.
RICHARD H. BATTLE, Esq.
JULIAN S. CARR, Esq.
EUGENE GRISSOM, M. D., LL. D.
A. M. LEWIS, Esq.
Hon. WM. L. SAUNDERS.
Hon. GEORGE V. STRONG.

COMMITTEE OF VISITATION FOR 1886.

Hon. JOHN C. SCARBOROUGH, Chairman, ... Johnston.
H. R. BRYAN, Esq., ... Newbern.
JOHN M. GALLOWAY, Esq., ... Madison.
THOMAS W. MASON, Esq., ... Northampton.
JAMES M. MULLEN, Esq., ... Halifax.
LEE S. OVERMAN, Esq., ... Rowan.
Hon. WALTER L. STEELE, ... Richmond.

1885-86

FACULTY AND OFFICERS.

HON. KEMP P. BATTLE, LL. D.,
PRESIDENT.

FACULTY.

(IN ORDER OF OFFICIAL SENIORITY.)

HON. KEMP P. BATTLE, LL. D.,
Professor of Political Economy, Constitutional and International Law.

REV. CHARLES PHILLIPS, D. D., LL. D.,
Professor Emeritus of Mathematics.

† *J. DEBERNIERE HOOPER, A. M.,
Professor of the Greek Language and Literature.

REV. ADOLPHUS W. MANGUM, A. M., D. D.,
Professor of Mental and Moral Science.

RALPH HENRY GRAVES, B. SC., C. AND M. E.,
Professor of Mathematics.

GEORGE TAYLOE WINSTON,
Professor of the Latin Language and Literature.

FRANCIS PRESTON VENABLE, PH. D., F. C. S.,
Professor of General and Industrial Chemistry.

JOSEPH AUSTIN HOLMES, B. AGR.,
Professor of Geology and Natural History.

JOSHUA WALKER GORE, C. E.,
Professor of Natural Philosophy and Engineering.

HON. JOHN MANNING, LL. D.,
Professor of Law.

*Resigned January 1st, 1886.

† Dead 1886.

REV. THOMAS HUME, JR., A. M., D. D.,
Professor of the English Language and Literature.

NELSON B. HENRY,
Professor of the Science and Art of Teaching.

WALTER D. TOY, M. A.,
Professor of Modern Languages.

WILLIAM B. PHILLIPS, PH. B., PH. D.,
Professor of Agricultural Chemistry and Mining.

JAMES LEE LOVE, PH. B.,
Assistant Professor of Mathematics.

GEO. F. ATKINSON, PH. B.,
Assistant Professor of Natural History.

SOLOMON COHEN WEILL, A. B.,
Acting Professor of the Greek Language and Literature.

*THOMAS W. HARRIS, A. M., M. D.,
Professor of Anatomy and Materia Medica.

---------- (To be elected),
Assistant Professor of Engineering and Physics.

---------- (To be elected),
Professor of the Greek Language and Literature.

OFFICERS.

GEORGE TAYLOE WINSTON,
Librarian.

C. C. NEWTON,
Assistant Librarian.

J. W. GORE,
Secretary and Registrar.

W. T. PATTERSON,
Bursar.

*Resigned February 26th, 1886.

GENERAL INFORMATION.

The University of North Carolina was established in obedience to a clause of Section XLI. of the Constitution of the State, adopted on the 18th of December, 1776, viz: "All useful learning shall be duly encouraged and promoted in one or more Universities."

The charter was granted in 1789. On October 12th, 1793, the corner-stone of the first building, the "Old East," was laid by William Richardson Davie, afterwards Governor. The doors were opened for students in February, 1795. The buildings are now nine in number, with ample dormitories, recitation rooms and public halls.

The University is situate at Chapel Hill, twenty-eight miles from Raleigh, the seat of government, and is reached by a branch of the North Carolina Railroad from University Junction, on which daily trains run.

Its government is under the control of a Board of eighty Trustees, elected by the joint vote of the General Assembly. Of these, one-fourth go out of office, and their places are filled, every two years. Although not so required by law, in practice they are distributed among the Congressional Districts. The Board meets regularly twice a year; in the winter at Raleigh, on a day selected by the chairman, and in the summer at Chapel Hill, during Commencement week. The former is called the Annual Meeting. The Governor is *ex-officio* chairman of the Board. Ten constitute a quorum. During the recess of the Board, an Executive Committee of seven Trustees, elected at the annual meeting, exercises all the powers of the Board of Trustees, except those specially reserved.

DISCIPLINE.

The discipline of the institution is designed to prevent irregularities and excesses which conflict with the improve-

ment of its members. The laws require faithful attention to duty and abstinence from everything that may interrupt or disturb study. Students will be required to observe decorum and courtesy towards each other at all times. They will not be allowed to retain in their possession during their connection with the University any pistol or other dangerous weapon.

The Faculty will remove from the University any student who is negligent of his duties, or exerts an evil influence over his fellows.

The practice of *hazing* in all its forms is strictly prohibited. The two literary societies have passed joint resolutions to co-operate with the Faculty in securing its suppression.

EXAMINATIONS AND REPORTS.

Each student is required to attend, on an average, three class exercises daily. In addition to the daily recitations and lectures, systematic written examinations are held from time to time on the various studies, and, at the close of each term, comprehensive and searching final examinations are held on all the studies pursued during the term.

Regular monthly reports are made to parents concerning the punctuality and diligence of the students, and detailed reports of scholarship are made at the close of each term.

LITERARY SOCIETIES.

In connection with the University are the Dialectic and Philanthropic Literary Societies, to one of which each student is required to attach himself, unless excused for special reasons. The halls and libraries of these societies are commodious and elegantly furnished. The libraries contain each over seven thousand volumes, including history, biography, poetry, science and philosophy. Each society owns many valuable portraits and a considerable museum of curiosities and minerals.

The exercises of these societies and access to their libraries deserve to be ranked among the advantages offered by the University. They afford practice in debating and writing, and familiarize the students with the rules of order governing deliberative assemblies.

LIBRARIES.

The libraries of the two societies have been already mentioned. The University library contains about eight thousand five hundred volumes and twenty-five hundred pamphlets. It is open daily for the use of the students, having been re-arranged and classified by topics.

THE READING-ROOM.

During the present year the two Literary Societies and the University have united in the support of a reading-room. It is supplied with the leading literary, religious, scientific and political journals of the United States and England, and several from France and Germany. The list includes twelve Dailies; two Semi-weeklies; sixty-six Weeklies; twenty-three Monthlies; three Bi-monthlies; eight Quarterlies. The room is open daily from 8 A. M. to 6 P. M., and is free to all the students.

UNIVERSITY LECTURES.

During the session a public lecture, upon some subject of literature or science, is delivered the second Saturday evening of each month by a member of the Faculty or some distinguished visitor.

THE ELISHA MITCHELL SCIENTIFIC SOCIETY.

This society was organized for the purpose of encouraging and stimulating scientific research. It meets the third Wednesday evening of each month during the session, to hear

papers and discuss questions of interest that are proposed. Any person in the State of North Carolina, interested in the work and progress of the Natural Sciences, may become an active member. Its proceedings are published in an annual journal.

UNIVERSITY MAGAZINE.

The University Magazine is published monthly by the two Literary Societies of the University. Its object is to stimulate the students to independent literary work and to train them in the Art of Expression. It also furnishes a review of University matters, and gives interesting information about former students.

RELIGIOUS SERVICES.

The students are expected to attend the Sunday Bible classes, the daily morning prayers in the University chapel, and the Sunday services in the several churches in the village.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

There is a branch of the Young Men's Christian Association among the students. It has many members of spirit and activity, and its influence for good is very marked. Regular meetings are held every Sunday afternoon, and prayer-meetings each evening during the week, except Friday and Sunday, in one of the University halls set apart for the purpose.

MUSEUMS.

THE UNIVERSITY MUSEUM occupies the large hall on the third floor of the Old East Building. Here the cabinets of the various departments have been brought together and arranged. The Geological and Mineralogical collection includes the "Vienna Cabinet," which alone comprises over two thousand specimens from all parts of the world; a large

collection of minerals, rocks and fossils, collected by the late Dr. Emmons, when State Geologist, donated to the University by the State; and much material secured through the kindness of the late State Geologist, Prof. Kerr; a set of North Carolina marls, now so extensively known as fertilizers; samples of mica, gold and other minerals, and of building stones found within the State.

THE ZOOLOGICAL COLLECTION includes a cabinet of insects collected in the vicinity of Chapel Hill, containing rare and valuable species, and a large number of reptiles, fishes and marine invertebrates, preserved in alcohol.

IN BOTANY, besides an Herbarium of the local flora, there is a fine set of native woods, carefully prepared and labeled; and a large collection of seeds, grains and fibres from many countries, which will be employed in the experiments of the students in Botany.

Under the head of the Department of Chemistry will be found an account of the INDUSTRIAL AND AGRICULTURAL MUSEUM.

MEDALS AND PRIZES.

MEDAL FOR ORATORY.—The Misses Mangum, of Orange, offer *in memoriam* of their father, Willie P. Mangum, a gold medal as a prize for the best oration, at the annual Commencement.

THE MATHEMATICAL PRIZE.—A prize is offered in honor of Dr. James Phillips and Dr. Charles Phillips, by the sons of the latter. It will be awarded to the member of the third class in Mathematics who attains the highest proficiency above a certain absolute standard.

THE MORAL SCIENCE MEDAL.—Mr. David G. Worth, of Wilmington, offers a medal for the best scholarship in Moral Science.

THE LATIN PRIZE.—A prize is offered to the member of the Sophomore Latin class that shall show the finest appreciation of Latin Literature.

THE B. F. MOORE SCHOLARSHIPS.

The late B. F. Moore, of Raleigh, bequeathed $5,000, the interest of which is to be devoted to paying the tuition of students.

THE DEEMS FUND.

This Fund was instituted by the Rev. Dr. C. F. Deems, pastor of the Church of the Strangers, New York, as a memorial of his son, Lieutenant Theodore Disosway Deems, who was born at Chapel Hill while his father was in the Faculty of the University. It is intended to assist needy students by loans. In 1881 it was greatly enlarged through the munificence of Mr. Wm. H. Vanderbilt. On the 1st of February, 1886, there were notes amounting to $12,835.34, representing current loans to students. To that date eighty-four students had been helped by the fund. As payments are made, new loans will be made to applicants who meet the requirements. They must come with good recommend tions for character; or, if members of the University, must have demonstrated to the Faculty that they are worthy of assistance. The loans are made at six per cent. interest, on satisfactory security, and for a sufficient length of time to make the payments easy.

THE FRANCIS JONES SMITH FUND.

Miss Mary Ruffin Smith, of Orange, has left a valuable tract of fourteen hundred and forty acres of land in Chatham county, known as the Jones Grove Tract, the income of which, or of the proceeds if sold, shall be used for the education of such students as the Faculty may designate.

Part of this income will be available during the ensuing Autumn.

The above name is given to the fund at the request of the testatrix.

ANNUAL EXPENSES.

Tuition (including room and attendance)	$85 00	$ 85 00
Deposit for repairs	2 00	2 00
Gymnasium fee	2 00	2 00
Washing	9 00	9 00
Board	72 00 to	121 50
Wood	3 50 to	10 50
Lights	1 00 to	2 00
Books	7 00 to	14 00
Total	$181 50	$246 00

To these items must be added others which will be determined by the habits of the students themselves, viz: travelling expenses, clothing, furniture of room, pocket money and fees in one of the literary societies. Books and stationery will be furnished at New York retail prices.

During the present session many students, by forming clubs, obtained board at cost, being not more than $8.00 per month.

The fees for tuition, repairs and gymnasium must be paid in advance. The Faculty earnestly advises parents to send the money necessary for defraying the expenses of their sons to W. T. Patterson, Esq., Bursar, who will safely keep and pay out the same without charge. Pains will be taken to confine the expenses of education at the University within reasonable limits. If the provisions of the Acts concerning the University, in The Code, are faithfully observed, parents and guardians may feel confident that this desirable result will be secured.

STATE STUDENTS.

By section 2633 of The Code of North Carolina, "It shall be the privilege of the board of county commissioners, in each county in this State, forever to select annually one native of the State, resident in said county, of good moral

character and capacity for usefulness, without the requisite means to defray the necessary expenses of education, who shall be admitted to any classes in the University for which he may be prepared, free of all charges for tuition and room rent, so that each county may always have one representative."

By section 2634 of The Code, it is required that the applicant for the county appointment shall prove, by his own oath, and at least one other credible witness, that neither he nor his parents or guardian have the requisite means to defray his tuition and room rent.

BEGINNING OF THE SESSION.

The annual session begins regularly on the last Thursday in August and ends on the first Thursday in June. There is an intermission of about a week at Christmas.

MATRICULATION.

For admission into the University such preparation is required as will enable each student to pursue with advantage the course which he may select. As a rule, each matriculate must be sixteen years of age. Exceptions may be allowed at the discretion of the Faculty.

EXAMINATION FOR ENTRANCE.

IN LATIN.—Cæsar's Gallic War (5 books), Virgil's Æneid (5 books), Cicero's Orations (4). Equivalent amounts from other authors will be accepted. A thorough acquaintance with the forms of declension and conjugation and the general principles of construction is absolutely essential. Slight deficiencies in the amount of reading may be supplied after entering.

IN GREEK.—Grammar (Goodwin's, Curtius', or Hadley's), Leighton's or White's Greek Exercises, Xenophon's Anabasis (3 books).

[Applicants for Classical course will be required to exhibit general acqaintance with Ancient History, Geography and Mythology.]

IN MATHEMATICS.—Arithmetic, Algebra (to Equations of Second Degree).

IN ENGLISH.—English Grammar. Introduction to Rhetoric and Composition.

Applicants wishing to pursue the Classical course are examined in all the above studies. Those desiring to take the Philosophical course are examined in Latin or Greek, according to selection made, Mathematics and English. For the Scientific course the applicants are examined in Mathematics and English.

Optional students are examined in such of the above as relate to the studies they select.

For admission into advanced classes, applicants will be examined in the studies completed by the classes they wish to join.

UNDERGRADUATE COURSES OF STUDY.

The Faculty recommends one of the following courses of study:

[The figures in parentheses denote the number of recitations or lectures per week.]

I. CLASSICAL COURSE.

This leads to the degree of Bachelor of Arts, (A. B.)

FIRST YEAR.

First Term—Algebra (4), Latin (4), Greek (4), English (2), History (1), Hygiene (six lectures), Practical Morals (six lectures).

Second Term—Geometry (4), Latin (4), Greek (4), English (2), History (1).

SECOND YEAR.

First Term—Trigonometry (4), Latin (4), Greek (4), Chemistry (3), English (1).

Second Term—Analytical Geometry (4), Latin (4), Greek (4), Chemistry (3), English (1).

THIRD YEAR.

First Term—Physics (4), Logic (2), English (1), Elective (9), of which at least (3) must be devoted to a modern or classic language.

Second Term—Physics (4), Logic and Psychology (2), English (1), Elective (9), subject to same condition as in first term.

FOURTH YEAR.

First Term—Political Economy (3), English Literature (3), Essays and Orations (1), Psychology and Moral Philosophy (2), Elective (6), subject to same condition as in third year.

Second Term—Constitutional and International Law (3), English Literature (3), Essays and Orations (1), Moral Philosophy (2), Elective (6), subject to same condition as in third year.

Elective Studies—History (3), French (3), German (3), Latin (4), Greek (4), Anglo-Saxon (3), Science and Art of Teaching (3), Industrial Chemistry (3),

Qualitative Chemical Analysis (3), Quantitative Chemical Analysis and Assaying (3), Physiology, Zoology and Botany (3), Economic Entomology (3), Advanced Botany (3), Surveying and Engineering (3), Calculus (4), Practical Horticulture (2), Biological Laboratory (2), Astronomy (1½), Theoretical Mechanics (1½), Geology (1½), Mineralogy (1½), Business Law (1), Metallurgy (1½), Mental and Moral Philosophy (2).

2. PHILOSOPHICAL COURSE.

This leads to the degree of Bachelor of Philosophy, (Ph. B.)

FIRST YEAR.

First Term—Algebra (4), Latin or Greek (4), German or French (3), English (2), History (1), Drawing (1), Hygiene (six lectures), Practical Morals (six lectures).

Second Term—Geometry (4), Latin or Greek (4), German or French (3), English (2), History (1), Drawing (1).

SECOND YEAR.

First Term—Trigonometry (4), Latin or Greek (4), German or French (3), Chemistry (3), English (1).

Second Term—Analytical Geometry (4), Latin or Greek (4), German or French (3), Chemistry (3), English (1).

THIRD YEAR.

First Term—Physics (4), Physiology (3), Logic (2), English (1), Elective (6).

Second Term—Physics (4), Zoology and Botany (3), Logic and Psychology (2), English (1), Elective (6).

FOURTH YEAR.

First Term—Political Economy (3), English Literature (3), Essays and Orations (1), Astronomy (3), Psychology (2), Elective (3).

Second Term—Constitutional and International Law (3), English Literature (3), Essays and Orations (1), Geology (3), Moral Philosophy (2), Elective (3).

Elective Studies—Studies to fill out the hours marked Elective in the above course, may be chosen from either or both of the lists of Elective Studies given under the Classical Course and Scientific Course.

3. SCIENTIFIC COURSE.

This leads to the degree of Bachelor of Science, (B. S.)

FIRST YEAR.

FIRST TERM—Algebra (4), German or French (3), or Latin (4), English (2), History (1), Entomology (1), Drawing (1), Physiology (3), Hygiene (six lectures), Practical Morals (six lectures).

SECOND TERM—Geometry (4), German or French (3), or Latin (4), English (2), History (1), Entomology (1), Drawing (1), Zoology and Botany (3).

SECOND YEAR.

FIRST TERM—Trigonometry (4), German or French (3), or Latin (4), English (1), Chemistry (3), Qualitative Chemical Analysis (3), Biological Laboratory (2).

SECOND TERM—Analytical Geometry (4), German or French (3), or Latin (4), English (1), Chemistry (3), Qualitative Chemical Analysis (3), Biological Laboratory (2).

THIRD YEAR.

FIRST TERM—Physics (4), Mineralogy (3), Industrial Chemistry (3), Logic (2), English (1), Elective (3).

SECOND TERM—Physics (4), Geology (3), Industrial Chemistry (3), Logic and Psychology (2), English (1), Elective (3).

FOURTH YEAR.

FIRST TERM—Astronomy (3), Elective (12), (of which (6) must be devoted to Science.)

SECOND TERM—Elective (15), (of which (6) must be devoted to Science.)

ELECTIVE STUDIES—Advanced Botany (3), Quantitative Chemical Analysis and Assaying (3), Surveying and Drafting (3), Calculus (4), Anatomy and Physiology of Domestic Animals (3), Science and Art of Teaching (3), History (3), Psychology and Moral Philosophy (2), English Literature (3), Political Economy, Constitutional and International Law (3), French or German (3), Economic Entomology (2), Practical Horticulture (2), Agricultural Chemistry (1½), Metallurgy (1½), Mechanics (1½), Practical Geology (3), Business Law (1), Essays and Orations (1).

For TEACHERS' COURSE, see DEPARTMENT OF NORMAL INSTRUCTION.

For courses in AGRICULTURE, and CIVIL ENGINEERING and MINING, see COLLEGE OF AGRICULTURE AND THE MECHANIC ARTS.

For course in LAW, see SCHOOL OF LAW.

OPTIONAL COURSES.

The Faculty earnestly advises students to pursue one of the regular courses. But in proper cases they are allowed to choose studies out of the courses, as may be deemed most advantageous, provided they have fifteen class exercises a week, whether lectures, recitations or laboratory practice.

An optional course once chosen must be adhered to for the session, unless for special reasons the Faculty allows a change. No student is permitted to take a course not deemed by the Faculty worthy of his time and efforts.

ADVANCED OR POST-GRADUATE INSTRUCTION.

Advanced instruction is now offered in the several departments of the University.

Students who wish to pursue an advanced course of study are received with or without reference to their being candidates for a degree. In all cases the instructors must be satisfied that the student is prepared to follow the instruction in the course contemplated.

Candidates for a degree are required to make written application to the faculty, stating the course they design to pursue. They must also present their diplomas or certificates from the institution with which they have been connected, testifying that they have completed a course corresponding to one of the under-graduate courses of the University.

The method of instruction will vary with the nature of the study, but the general aim will be to encourage students to undertake independent work in some special branch of study, while he is adding to his intellectual culture.

POST-GRADUATE COURSES.

[Applicants for a Master's degree must have completed the course leading to the corresponding Bachelor's degree.]

1. CLASSICAL COURSE.

For the degree of Master of Arts, (A. M.)

Three studies, pursued for one year, to be selected from the following groups, subject to the condition, that one study must and two may be selected from group 1, but not more than one from any other group.

1. Latin, Greek.
2. German, French, English.
3. Political Science, Mental and Moral Science, History.
4. Chemistry, Geology, Metallurgy, Natural History.
5. Mathematics, Natural Philosophy.

2. PHILOSOPHICAL COURSE.

For the degree of Master of Philosophy, (Ph. M.)

Three studies, pursued for one year, to be selected from the following groups, subject to same condition as in CLASSICAL COURSE.

1. Latin, Greek, German, French, English.
2. Political Science, Mental and Moral Science. History.
3. Chemistry, Geology, Metallurgy, Natural History.
4. Mathematics, Natural Philosophy.

3. SCIENTIFIC COURSE.

For the degree of Master of Science, (M. S.)

Three studies, pursued for one year, to be selected from the following groups, subject to same condition as in CLASSICAL COURSE.

1 Chemistry, Geology, Metallurgy, Natural History, Mathematics, Natural Philosophy.
2. Latin, Greek, German, French, English.
3. Political Science, Mental and Moral Science, History.

4. COURSE FOR THE DEGREE OF DOCTOR OF PHILOSOPHY, (PH. D.)

This course requires two years:

For the *first year* the candidate may select any one of the courses offered for a Master's degree (A. M., PH. M., M. S.)

The *second year* will be devoted to a more extensive study of two of the subjects pursued in the first year.

SPECIAL CERTIFICATES.

A special certificate of graduation in a department (Latin, or Mathematics, or Chemistry, &c.,) is awarded upon application to any student who attains the required grade.

DEGREES.

BACHELOR'S DEGREES.

THE DEGREE OF BACHELOR OF ARTS is conferred upon those students who have passed approved examinations on the studies enumerated in the under-graduate CLASSICAL COURSE.

THE DEGREE OF BACHELOR OF PHILOSOPHY is conferred upon those students who have passed approved examinations on the studies enumerated in the under-graduate PHILOSOPHICAL COURSE.

THE DEGREE OF BACHELOR OF SCIENCE is conferred upon those students who have passed approved examinations on the studies enumerated in the under-graduate SCIENTIFIC COURSE.

MASTER'S DEGREES.

THE DEGREE OF MASTER OF ARTS is conferred upon those students who have been accepted as qualified candidates and have pursued, with residence, the post-graduate CLASSICAL COURSE, passing satisfactory examinations thereon and submitting a suitable thesis.

THE DEGREE OF MASTER OF PHILOSOPHY is conferred upon those students who have been accepted as qualified candidates and pursued, with residence, the post-graduate PHILOSOPHICAL COURSE, passing satisfactory examinations thereon and submitting a suitable thesis.

THE DEGREE OF MASTER OF SCIENCE is conferred upon those students who have been accepted as qualified candidates and have pursued, with residence, the post-graduate SCIENTIFIC COURSE, passing satisfactory examinations thereon and submitting a suitable thesis.

DOCTOR OF PHILOSOPHY.

THE DEGREE OF DOCTOR OF PHILOSOPHY is conferred upon those students who have been accepted as qualified candidates and have pursued, with residence, the post-graduate course prescribed for this degree, passing satisfactory examinations thereon and submitting a suitable thesis.

LITERARY DEPARTMENT.

KEMP P. BATTLE, LL. D.,
Professor of Political Economy, Constitutional and International Law.

ADOLPHUS W. MANGUM, A. M., D. D.,
Professor of Mental and Moral Science.

GEORGE TAYLOE WINSTON,
Professor of the Latin Language and Literature.

*J. DEBERNIERE HOOPER, A. M.,
Professor of the Greek Language and Literature.

THOMAS HUME, JR., A. M., D. D.,
Professor of the English Language and Literature.

WALTER D. TOY, M. A.,
Professor of Modern Languages.

SOLOMON C. WEILL, A. B.,
Acting Professor of Greek.

OUTLINE OF INSTRUCTION

IN THE SEVERAL DEPARTMENTS.

POLITICAL ECONOMY, CONSTITUTIONAL AND INTERNATIONAL LAW, BUSINESS LAW.

President Battle.

UNDER-GRADUATE CLASSES.

1. POLITICAL ECONOMY:

Instruction is given by text-books and lectures to the senior class for three hours a week for the first term. The lectures are designed to throw light on the great economical questions of the day, such as Banking, Bi-metallism, Protection, Wages, Co-operation, &c.

2. CONSTITUTIONAL LAW:

Three hours a week for the greater part of the second term of the senior class are given to this study. It is preceded by a short course in the History of

*Resigned January 1st, 1886.

American Politics. The lectures give information concerning the history of the Constitution of North Carolina as well as of the United States. The facts and principles of many leading cases, settling the construction of the Constitution of the United States are given and their connection with American history is pointed out.

3. International Law:

A short course of lectures is given in this department to the senior class near the close of the second term.

4. Business Law:

The class is taught by text-book and lecture for one hour a week throughout the year, such legal principles, civil and criminal, as will be useful to men in any calling.

POST-GRADUATE CLASSES.

Political Economy:

In this class will be studied the works of such authorities as Roscher, Mill, Bagehot, McLeod, &c., and discussions will be required of the great unsettled questions of the Science, such as Banking, Bi-metallism, Protection, &c.

Constitutional Law:

The subjects studied in this class will be the origin and development of the English Constitution, of the Constitutions of the United States and of this State. The political histories of these countries will be carefully read. Considerable attention will be paid to the Roman Law. Such works as those of Hallam, Stubbs, Yonge, Green, Bancroft, Curtis, Von Holst, Hildreth, &c., will be used, and also the opinions of Chief Justice Marshall and other Judges of the Supreme Court in leading cases.

It will be the effort of the instructor to so guide the student that he may have material with which he may intelligently form his own conclusions on the great subjects of Constitutional Law and Political Economy, which as an American citizen it will be his duty to consider.

MORAL PHILOSOPHY.

Professor Mangum.

In this department the work by under-graduates extends through the third and fourth years of the regular courses.

A short series of lectures on Practical Morals is delivered to first year students at the beginning of the first term.

UNDER-GRADUATE CLASSES.

LOGIC:

This begins with the first term and closes the first of March. Both the Aristotelian and the Hamiltonian forms are taught. Special attention is given to praxis in fallacies and in the logical analysis of selections in literature.

PSYCHOLOGY (first class):

The phenomena of the Intellect; from March to the end of the session.

PSYCHOLOGY (second class):

The Sensibilities and the Will; from the first of the session to November.

Much care is taken to enable the student to appreciate the utility of this branch of science in the common experience of life, and to maintain for psychical studies the proper relative influence.

CHRISTIAN EVIDENCES:

This subject occupies the class from the first of November to the end of the first term. Their studies are supplemented with a separate course of lectures.

ETHICS:

This extends through the second term. It is taught from the standard of Christianity as the only acceptable exposition of man's nature and duty.

ELECTIVE CLASSES:

An extra class in LOGIC and PSYCHOLOGY is offered in the first term of the second year of the course.

A class in the HISTORY OF PHILOSOPHY is elective in the second term.

POST-GRADUATE CLASSES.

In these instruction is offered in one or more branches of the department: the subjects being varied to some extent to suit the wishes and aims of the student.

These classes are completed in one or two years, according to the post-graduate course selected.

Instruction is given by text-books and lectures.

THE LATIN LANGUAGE AND LITERATURE.

Professor Winston.

UNDER-GRADUATE CLASSES.

FIRST YEAR.—(4 *hours a week.*)

Texts :—Cicero (de Senectute or de Amicitia or Epistolæ Selectæ or Extracts), Livy or Curtius. (*Twice a week.*)

Latin Grammar and Composition. (*Twice a week.*)

History, Mythology and Geography in connection with the texts.

Occasional Lectures, as required.

SECOND YEAR.—(4 *hours a week.*)

Texts :—Tacitus (Agricola or Germania), Pliny the Younger, Selections from Horace.

Composition and Grammar, by lectures and original exercises.

Comparative Philology and the Development of Latin Forms and Syntax (Lectures).

Written Criticisms, Abstracts and Paraphrases of the Texts.

THIRD YEAR (ELECTIVE).—(4 *hours a week.*)

Texts :—The Satirists (Horace, Juvenal and Persius), with literary criticism and study of contemporaneous history. Parallel Reading in English Satire. *Or similarly,*

The Dramatists (Terence and Plautus).

Cicero (one or more orations), with special study of style and the subjunctive; Parallel Reading of Cæsar.

Grammatical Theses, embodying results of special comparative study of Cicero and Cæsar.

Exercises in composition in imitation of Cicero.

Reading at Sight; Cicero, Cæsar, Livy.

Virgil's Æneid, with special effort for rapid and fluent rendering. The entire Æneid is read during the year, and the instruction aims to develop an appreciation of the spirit of Epic Poetry and of the literary and historical value of the Æneid.

POST-GRADUATE WORK.

FIRST YEAR.—(4 *hours a week.*)

Texts :—The Historians (Sallust, Livy and Tacitus), with literary criticism and study of contemporaneous history. Parallel study of the style and method of English Historians. *Or similarly,*

The Moralists (Cicero, Seneca).

Reading at Sight: Cæsar, Cicero, Suetonius.
Ovid's Metamorphoses (rapid and fluent rendering).
Special study of Greek and Roman Mythology and Antiquities.
Exercises in composition in imitation of Livy and Tacitus.
Historical Theses embodying results of special research.

SECOND YEAR.—(1 *hour a week with the Professor*).

The work of the Professor is chiefly suggestive and responsive. The student is expected to give one-third of his entire time to the study.

Texts :—1. The Rhetoricians (Cicero, Quintilian, Horace), with special study of the Latin style. Roman Literature. *Or*,
1. The Scientists (Pliny the Elder, Lucretius).
2. Tibullus, Propertius, and Martial. *Or*,
2. Horace and Ovid.

Special Historical Study of the Close of the Republic and Beginning of the Empire, with readings in Cicero, Cæsar (Bellum Civile), Sallust, Suetonius.
Study of Comparative Philology, Private Research, Thesis.
Virgil's Georgics or Lucan's Pharsalia (rapid and fluent reading).
Composition in verse. Latin theses.

THE GREEK LANGUAGE AND LITERATURE.

**Professor Hooper.*

UNDER-GRADUATE CLASSES.

FIRST YEAR.—*Four recitations weekly.*

Homer, Herodotus, Xenophon, Exercises in Composition.

SECOND YEAR.—*Four recitations weekly.*

Thucydides, Demosthenes and the Tragedians, Grecian History, Exercises.

THIRD YEAR (ELECTIVE).—*Four recitations weekly.*

Selections from Attic Orators, Dramatic Writers.

Among books of reference are Schlegel's Lectures, Thirlwall's and Grote's Histories, Schlieman's Explorations.

POST-GRADUATE CLASSES.

These classes will be announced at the beginning of the next session (1886–'87).

N. B.—The chair of Greek will be filled June 22d, 1886.

*Resigned January 1st, 1886.

ENGLISH LANGUAGE AND LITERATURE.

(Including Anglo-Saxon.)

Professor Hume.

Pupils who are intending to enter this department should prepare themselves by reading well-annotated editions of standard authors and practising rhetorical as well as grammatical analysis. Further suggestions will be given to any who apply.

UNDER-GRADUATE CLASSES.

First Year.—(*Three hours a week.*)

Composition—Grammar and Rhetoric (Bain). Studies in Nineteenth Century Literature. Parallel Reading in Scott's Poems and Ivanhoe, with Freeman's English History and Shakspere's King John. Haldeman's Etymology.

Second Year.—(*One hour a week.*)

Morris's Historical Grammar. Essayists of the Eighteenth Century (Swift, Addison). Pope's and Goldsmith's Poems. Parallel Reading in Thackeray's Humorists, Shakspere's Macbeth and Richard Second, Freeman's History.

Third Year.—(*One hour a week.*)

Hales's Longer English Poems. Rhetoric. Idyls of the King, Malory's Morte d' Arthur with Professor's "Guide to Study." Parallel Reading in Tennyson's Princess, Shakspere's Henry Fourth and Henry Fifth.

Fourth Year.—Literature, (*three hours a week*); Essays and Orations, (*one hour a week*).

Literature.—Dowden's and Hudson's Shakspere Manuals. Richard Third, with lectures on Shakspere's Illustrations of English History. Shakspere's Comedies, with study of metrical and other tests, &c. Hamlet, with printed Guide to Study. Spenser, Chaucer, Milton. History of the Language and Literature.

Essays and Orations.—Lectures on Methods of Composition and History of Oratory. Bacon's and Other Essays. British and American Orations (Annotated Edition). Practice in writing analyses and criticisms, and in speaking. The class is divided into sections and special work is assigned to each section. This work is afterwards reviewed by the whole class.

Anglo-Saxon Class (Elective).—(*Three hours a week*).

Anglo-Saxon Grammar (Sweet). Gospel of John. Selections from Aelfric and Alfred, Layman's Brut. The Ormulum and The Ancren Riwle. Marsh's Early Literature.

ADVANCED OR POST-GRADUATE CLASSES.

Selections may be made from the following subjects or groups and from others given by the Professor. Group No. 4 has been studied by post-graduate students during this session :

1. Morris and Skeat's Specimens of Early English. Piers Plowman. Wyclif, Chaucer's Parlement of Foules.

2. Comparative Anglo-Saxon Grammar. Sievers' Old English Grammar. Beowulf.

3. The Gesta Romanorum. More's Utopia. Lyly's Euphues. Elizabethan English.

4. Ralph Roister Doister. Marlowe. Ben Jonson. Sources of Shakspere's Dramas, their Characters and Art.

5. English Bible Versions through Tyndal to King James and Revised Forms; their influence on Language and Literature.

MODERN LANGUAGES.

Professor Toy.

The subjects taught in this department are the French and German languages and their literatures.

UNDER-GRADUATE CLASSES.

I. FRENCH.

1. *Three times a week throughout the year :*
Chardenal's *First French Course*. *Anecdotes Nouvelles*. *Télémaque* or George Sand, *La Mare au diable*. Written and oral exercises. Masson's or Gasc's Dictionary.

2. *Three times a week throughout the year :*
Breymann's Grammar. Erckmann-Chatrian, *Le Conscrit de* 1813, or Feuillet, *Le Roman d'un Jeune Homme Pauvre;* Corneille, *Le Cid;* Molière, *Les Femmes Savantes;* Victor Hugo, *Hernani*. French Literature (lectures, 2d term). Written exercises.

3. (Elective). *Three times a week throughout the year :*
Fables of La Fontaine (1 book); Molière (2 comedies); Racine (2 tragedies); Victor Hugo, *Notre Dame de Paris*. History of France (in French).

II. GERMAN.

1. *Three times a week throughout the year:*
Sheldon's Grammar. Whitney's Reader or Grimm's *Mærchen.* Fouqué, *Undine.* Written and oral exercises. Whitney's or Thieme's Dictionary.

2. *Three times a week throughout the year:*
Whitney's Compendious Grammar. Freytag, *Die Journalisten;* Schiller, *Maria Stuart;* Lessing, *Minna von Barnhelm;* Goethe's *Autobiography* (selections). German literature (lectures, 2d term). Written exercises.

3. (Elective). *Three times a week throughout the year:*
Goethe, *Faust* (Part 1); Lessing, *Nathan der Weise;* Schiller, *Thirty Years' War;* Ebers, *Homo Sum;* History of Germany (in German).

In each language Class 1 is designed to give an exact acquaintance with the grammatical forms and the principles of syntax.

The instruction is given partly by grammatical text-books and exercises, written and oral, but chiefly by a careful study of good prose. At the end of the year the student is expected to translate simple prose at sight.

In Class 2, some difficult points of grammar are discussed, but most of the time is given to the reading and literary criticism of standard writers, classic and modern.

In Class 3, large amounts will be read, in order to obtain a just appreciation of certain literary periods.

The following scheme shows how these classes are offered:

	French.	*German.*
1886–7	2 and 3	1 and 2
1887–8	1 and 3	2 and 3
1888–9	1 and 2	1 and 3
1890–1	2 and 3	1 and 2

POST-GRADUATE WORK.

Subjects for post-graduate work will be assigned upon application. Candidates from this University must have completed successfully the Elective Class (No. 3) in the language chosen. The work may be either of a literary or philological

character, and must in all cases be done by original investigation. The following are specimens of possible subjects:

1. The position of Victor Hugo in literature, politics and philosophy. 2. French Grammar and Literature in the 16th Century. 3. Old French Grammar and the interpretation of selected texts. 4. Middle High German Grammar, interpretation of the Niebelungenlied. 5. Prose writers of the 19th Century after Goethe.

Special lectures and regular conferences will be announced as occasion requires.

SCIENTIFIC DEPARTMENT.

RALPH HENRY GRAVES, B. Sc., C. AND M. E.,
Professor of Mathematics.

FRANCIS PRESTON VENABLE, PH. D., F. C. S.,
Professor of General and Industrial Chemistry.

JOSEPH AUSTIN HOLMES, B. AGR.,
Professor of Geology and Natural History.

JOSHUA WALKER GORE, C. E.,
Professor of Natural Philosophy and Engineering.

WILLIAM B. PHILLIPS, PH. B., PH. D.,
Professor of Agricultural Chemistry and Mining.

JAMES LEE LOVE, PH. B.,
Assistant Professor of Mathematics.

GEO. F. ATKINSON, PH. B.,
Assistant Professor of Natural History.

---------- (To be elected),
Assistant Professor of Engineering.

OUTLINE OF INSTRUCTION

IN THE SEVERAL DEPARTMENTS.

MATHEMATICS.

Professor Graves and Assistant Professor Love.

UNDER-GRADUATE CLASSES.

FIRST YEAR.—*Four recitations a week:*
The studies are Algebra and Geometry.
Text-books:—Newcomb's Algebra, Wentworth's Geometry.

SECOND YEAR.—*Four recitations a week:*
Construction and use of Tables of Logarithms, Plane and Spherical Trigonometry, with applications, Analytic Geometry.
Text-books:—Newcomb's Trigonometry and Tables, Smith's Conic Sections.

THIRD YEAR (ELECTIVE).—*Four recitations a week:*

Solid Analytic Geometry, Differential and Integral Calculus.

Text-books:—Venable's Notes on Solid Geometry, Williamson's Differential Calculus, Williamson's Integral Calculus.

POST-GRADUATE CLASSES.

The work in these classes extends over one or two years. The studies consist of selections from more advanced topics, such as Theory of Equations, Theory of Determinants, Differential Equations, Modern Algebra, Modern Geometry, Quaternions, &c.

Each student is constantly stimulated and assisted in his work and his progress is tested by oral and written examinations.

CHEMISTRY.

Professor Venable.

UNDER-GRADUATE CLASSES.

GENERAL CHEMISTRY.—*Three lectures a week through the year:*

The facts and general principles of Chemistry are presented in the following order:

1. Chemical Physics.
2. The Chemistry of the Non-metals and Metals.
3. Organic Chemistry.

Instruction is given mainly by lectures and these are illustrated by numerous experiments. The following reference books are recommended: Bloxam's Chemistry; Richter's Chemistry; Watts' Chemistry; Remsen's Organic Chemistry; Roscoe & Schorlemmer's Treatise on Chemistry.

INDUSTRIAL CHEMISTRY.—*Three lectures a week through the year:*

A knowledge of General Chemistry is a pre-requisite to this course. The applications of Chemistry to the arts and manufactures will be considered under this heading.

The subjects treated of will be the manufacture of glass, porcelain and earthenware; foods, their production, preparation and adulteration; clothing, printing, dyeing, bleaching, tanning; building materials; manufacture of candles, soap, ink, matches, &c.

Reference-books :—Wagner's Chemical Technology, Ure's Dictionary of Arts and Manufactures.

INDUSTRIAL MUSEUM.—Many specimens of crude and manufactured products have already been gathered for purposes of class illustration, and continual additions are being made to the collection.

POST-GRADUATE CLASS.

The study of Theoretical Chemistry, will be pursued with such text-books as Remsen, Wurtz and Meyer. The student will be required to prepare lists of chemical compounds, tabulate physical constants and make bibliographies of special chemical substances, using for the purpose chemical dictionaries and the various chemical periodicals.

ANALYTICAL CHEMISTRY.

Professor Venable and Professor Phillips.

UNDER-GRADUATE CLASSES.

The aim in this study will be to prepare students to become Analytical Chemists, Teachers of Chemistry, or Druggists. There are two classes.

QUALITATIVE ANALYSIS.—*Three afternoons a week through the year :*

Practice is first given in carrying out some of the simpler experiments for class illustration. The principles of Synthesis and Qualitative Analysis are also studied. This course may be taken after or at the same time with General Chemistry and is regarded as of great assistance to an intelligent study of the latter.

QUANTITATIVE ANALYSIS (ELECTIVE).—*Five afternoons a week through the year :*

Full instruction is given in practical chemistry, including the analysis of ores, soils, manures, technical products, &c. Students are also encouraged to undertake original researches.

POST-GRADUATE WORK.

Advanced and post-graduate work will be assigned in inorganic or organic laboratory work to any student desiring it.

A deposit of ten dollars is required of each student to defray the cost of apparatus and chemicals. The new laboratories will be ready in time for the Fall Term of 1886, and will be provided with water, gas and all other appliances for the prosecution of scientific work.

AGRICULTURAL CHEMISTRY AND MINING.

Professor Phillips.

UNDER-GRADUATE CLASSES.

AGRICULTURAL CHEMISTY (ELECTIVE):

A knowledge of General Chemistry is required. The lectures of the Professor will be supplemented by text-books, which will be announced at the beginning of the academic year. The following subjects will be discussed:

The chemical nature of plants; the sources whence plants derive their food; the means by which plants assimilate food; the object of manuring; the nature of commercial manures; and the chemical principles involved in their preparation; green manuring; sub-soiling; draining; the rotation of crops; fallowing. The purpose will be to train students in the knowledge of those scientific principles which should be known by every agriculturist. No attempt will be made to give instruction in the practical details of every-day life on the farm. Such details can only be learned on the farm itself. The closest attention will be paid to the economic aspect of the application of commercial manures.

MINERALOGY AND BLOW-PIPING:

This course will embrace elementary crystallography and the identification of minerals by means of the system of Weisbach in connection with the blow-pipe. The object will be to enable the student to identify minerals easily and

confidently. Especial attention will be paid to the common minerals which enter so largely into commerce.

Blow-piping will be taught in close connection with Mineralogy and Qualitative Chemistry.

Reference-books:—Dana's System of Mineralogy; Brush's Determinative Mineralogy; Cornwall's Manual of Blow-pipe Analysis (1882). Fraser's Tables for the Determination of Minerals by the system of Weisbach.

MINING (ELECTIVE).—*Three lectures a week during the second term:*

Some knowledge of Chemistry, Geology and Mineralogy will be required of every student. The course will follow the lectures upon Metallurgy and Mineralogy. It will be so arranged as to bear chiefly upon the most common and useful minerals, such as the ores of iron, copper, silver, gold, lead, zinc, tin, &c., as well as on mica, baryta, soapstone, kaolin, corundum, &c. The following subjects will be discussed:

Origin and nature of mineral deposits; their finding and opening; underground work, drilling, blasting, &c.; concentration of ores. During the summer vacation excursions will be arranged to the mining districts of the State. where the student will have the opportunity of seeing for himself the practical operation of principles he has already learned. As far as possible the illustrations of these principles will be drawn from sources near at hand, so as to familiarize the student with accessible localities.

METALLURGY (ELECTIVE).—*Three lectures a week during the Fall term:*

This course will embrace the methods used in the extraction of the common metals, together with the history of the metals and their uses. The student will have access to the very complete collection of ores and fuel secured by the University at the Freiberg School of Mines during the past year.

Reference-books:—Percy's Metallurgy; Röhrig & Crooke's Kerl's Metallurgy; Bloxam's Metals.

ASSAYING:

In connection with the lectures on Metallurgy there will be given a course of Assaying or Determination of Metals in the Dry Way. It will embrace the assay of ores of Gold, Silver, Lead, Copper, Tin, Nickel and Cobalt, especially. It will begin with the spring term in January and continue two months.

Reference-books:—Mitchell's Manual of Practical Assaying; Rickett's Assaying.

GEOLOGY AND NATURAL HISTORY.

Professor Holmes and Assistant Professor Atkinson.

I. GEOLOGY.

Professor Holmes.

UNDER-GRADUATE CLASSES.

The instruction in this subject includes the following:

1. GENERAL GEOLOGY.—*Three lectures per week during the second term:*

The aim in this class is to present the general principles of the science and some of its practical bearings. The lectures are accompanied by occasional field excursions and work in the laboratory. At the end of the course lectures are given on the general and economic geology of North Carolina.

2. PRACTICAL GEOLOGY (ELECTIVE).—*Three hours per week throughout the year, or during either term:*

To this class are admitted students who have passed satisfactorily the examination in General Geology.

During the first term the time is devoted to Field Geology and Lithology. The work in Field Geology includes excursions made to regions of geological interest, during the term, and when practicable, during a part of the summer vacation. The work in Lithology includes the study of typical and common rocks, in the field and in the laboratory.

During the second term the nature of the work varies according to circumstances. Students who have completed the work of the first term, will during this term undertake advanced work in Lithology. For students just entering the class the work will be somewhat similar to that of the first term. Special attention will be given to the general and economic geology of North Carolina.

The Geological Laboratory is provided with microscopes, microscopic sections of common rocks and minerals, and a number of lithological specimens.

Text-books and books of reference:—LeConte's Elements of Geology, Dana's Manual of Geology, Geikie's Text-Book of Geology, Geikie's Field Geology, Williams' Economic Geology, Reports of the U. S. Geological Survey, North Carolina and other State Surveys.

POST-GRADUATE WORK.

Post-graduate courses have been arranged as follows:

1. In General Geology, including the general principles of Dynamical, Structural and Historical Geology.

2. Economic Geology, including Geology as applied to Mining, Agriculture, Architecture, &c., in which special attention is given to the Geology of North Carolina.

3. Lithology and Field Geology, including special Microscopic study of rocks, and geological field work abont Chapel Hill and in other sections of the State during the summer vacation,

Text-books and details of courses will be given as these courses are assigned.

II. BOTANY.

Professor Holmes.

UNDER-GRADUATE CLASSES.

The following courses are offered:

1. ELEMENTS OF BOTANY.—*Three lectures per week during the latter half of the second term:*

This is designed as an elementary course for the general student, and as an introductory course for students intending to do advanced work in Botany. Instruction is given by lectures and laboratory work. The lectures include a discussion of the important facts connected with the structure and the life and growth of plants. The time spent in the laboratory is devoted to a study of the structure of the plant and the determination of species.

2. ADVANCED BOTANY (ELECTIVE).—*Three hours per week during the year:*

Under this heading two classes have been organized. These alternate, the instruction in each being offered every two years.

(*a*) SYSTEMATIC AND APPLIED BOTANY:

The work in this class consists largely of the systematic study of the flowering plants of the Chapel Hill region, in the laboratory and the field. Students who desire to do so, may collect, identify and preserve specimens of plants at their homes during the summer vacation; and one hundred such specimens properly mounted and presented at the Botanical Laboratory at the beginning of

the year, will count one hour of class work for that year. Instruction will be given in Applied Botany by lectures during both terms.

(*b*) AGRICULTURAL BOTANY:

The instruction is given by lectures and recitations, accompanied by work in the laboratory and field excursions. The course may be subdivided into the following:

(1) Cryptogamic Botany including a study with aid of microscopes, of typical forms of the lower groups of plants. Special attention is paid to the fungoid diseases of agricultural plants. This work extends through the first term.

(2) Grasses and Forage plants, taken up during the first half of the second term. The instruction is devoted to a study of the common grasses, cereals and valuable forage plants of other families.

(3) Vegetable Physiology, or the life and growth of plants, is taken up during the latter half of the second term. Special attention is given to the growth of agricultural plants as affected by cultivation, different kinds of soils and fertilizers.

4. HORTICULTURE (ELECTIVE).—*Two lectures per week through the year:*

During the first term the instruction is devoted mainly to the subjects of forestry, orchards and vineyards.

During the second term the following subjects are treated of in the order of mention:

Native and tropical fruits; farm and garden soils, their improvement by drainage, manuring, &c.; general management of the garden; cultivation of common vegetables and garden fruits; general management of flower gardens; some general principles in landscape gardening.

Text-books and books of reference:—Gray's Lessons and Manual of Botany, Gray's Botanical Text-books, Chapman's Southern Flora, Sach's Text-books, Bessey's Botany, and others of a special character.

POST-GRADUATE WORK.

Post-graduate work in Botany will embrace the following courses:

1. Work in the field and laboratory on the trees, shrubs and other flowering plants of the Chapel Hill region.

2. Special work in the laboratory and field on any special group or groups of plants—especially the grasses.

3. A more general course in Economic and Systematic Botany, in which special attention is paid to the uses of plants.

Text-books and details furnished on application.

III. ZOOLOGY.

Professor Atkinson.

UNDER-GRADUATE CLASSES.

Instruction will be given in the following subjects:

(1) HYGIENE:

A course of five lectures will be given at the beginning of the first term relating to the care of the general health.

(2) PHYSIOLOGY.—*Three lectures per week during the first term:*

Special attention will be given to the comparative physiology of respiration and circulation. The lectures will be illustrated by microscopic exhibitions of some of the lower forms of animal life, the tissues and blood of higher animals, circulation of blood in the web of a frog's foot, and by painless experiments upon animals.

(3) GENERAL ZOOLOGY.—*Three lectures per week during the first half of the second term:*

A part of the time will be devoted to the study of representative forms by the student himself.

(4) BIOLOGICAL LABORATORY:

In this course facilities will be offered for practical work in the dissection of animals, illustrating and amplifying the studies in physiology and general zoology. After becoming familiar with methods in the preliminary work, the student may elect, upon consultation with the professor in charge, a line of work more suited to his taste and needs.

During the second term of this study, the student may, with the Professor's permission, devote special attention to ORNITHOLOGY. This work will be conducted by lectures, laboratory and field work. Attention will be given to birds beneficial and injurious, to the habits of birds in migrations, nesting, etc., and to the collection and preservation of specimens representing the birds of North Carolina. The study occupies from five to six hours of actual work per week, and counts two hours per week for one year.

(5) ENTOMOLOGY:

A course extending through the year in the study of insects will be given introductory to the study of general zoology and economic entomology. The study will be conducted by means of lectures and field excursions. This is intended to lay the foundation for more satisfactory work in economic entomology. The course counts one hour per week for one year.

(6) ECONOMIC ENTOMOLOGY.—(ELECTIVE):

This study will be conducted partly by lectures upon the classification and metamorphoses of insects in general. Special attention will be given to the

habits and life history of insects injurious to vegetation, and remedies for insect ravages. Facilities will be offered for original work in breeding insects and noting their transformations. Field excursions for the purpose of collecting insects and to observe their habits in nature will form an important feature of the work. Laboratory work will consist of a study of the more important characters, and the preservation of the specimens for the museum.

(7) ANATOMY AND PHYSIOLOGY OF DOMESTIC ANIMALS.—*Three hours per week during the first term :*

The course will be given once in two years, alternating with (8).

(8) FEEDING AND BREEDING OF DOMESTIC ANIMALS.—*Three hours per week during the first term :*

The course will be given once in two years, alternating with (7).

Special arrangements will be made with students wishing to collect specimens for the museum during the summer vacation, so that the work will count in one of their courses. Upon application the Professor in charge will give further information.

Text-books and Books of reference :—Martin's Human Body; Flint's Text-Book of Human Physiology; Yeo's Manual of Physiology; Parke's Hygiene; Dalton's Physiology; French's Butterflies of the Eastern United States; Saunders' Insects Injurious to Fruits; Harris' Insects Injurious to Vegetation; Packard's Guide to the Study of Insects; Claus' Text-Book of Zoology; Brooks' Hand-Book of Invertebrate Zoology; Huxley's Anatomy of Invertebrate Animals; Huxley's Anatomy of Vertebrate Animals; Wilson's American Ornithology; Coues' Key to the Birds of North America; and others.

POST-GRADUATE WORK.

1. There will be post-graduate courses in Animal Biology, Systematic Zoology and Physiology.

2. ENTOMOLOGY.—The post-graduate courses in this subject have been arranged as follows:

a.—Systematic Entomology, including the identifying of a number of species representative of the more important orders. If desired a special study of any one group may follow the general principles of classification.

b.—ECONOMIC ENTOMOLOGY.—In this course advanced work will be pursued on the subject as outlined in (6) of the under-graduate work. In addition, the student will be expected to conduct experiments with remedies for injurious insects.

Books of reference furnished on application.

NATURAL PHILOSOPHY.

Professor Gore.

UNDER-GRADUATE CLASSES.

PHYSICS.—*This class meets four times weekly throughout the academic year:*

For admission to the class a knowledge of Plane Trigonometry is desirable. Instruction is given by recitations and experimental lectures.

The subjects taken up are elementary Mechanics (of solids, liquids and gases), Heat, Electricity, Magnetism, Sound and Light.

Text-book:—Deschanel's Natural Philosophy.

ASTRONOMY.—*Three recitations weekly during the first term:*

The subject is pursued as a branch of liberal education and hence treats of Spherical, Practical and Theoretical Astronomy, and Cosmical Physics. An elementary knowledge of Analytic Geometry is required for admission to the class.

Text-book:—Newcomb and Holden's Astronomy.

MECHANICS—(ELECTIVE).—*Three recitations weekly during the second term:*

The subject includes Statics, Dynamics, the Theory of Central Forces and an introduction to Rigid Dynamics. It is studied with the aid of Pure Mathematics, and constitutes a portion of Applied Mathematics. For admission to this class an elementary knowledge of Analytic Geometry is necessary.

Text-book:—Todhunter's Mechanics.

ADVANCED OR POST-GRADUATE CLASSES.

PHYSICS.—Students will be admitted to this classes who have completed the under-graduate class or its equivalent. The instruction will be experimental and theoretical.

EXPERIMENTAL.—Use of apparatus for illustration. Physical Manipulation, Physical Measurements with instruments of precision.

THEORETICAL.—Method of Least Squares, Reduction of observations, study of advanced works on selected portions of Physics.

MECHANICS.—Members of this class will study advanced works on the subjects of Statics and Dynamics with the aid of Differential and Integral Calculus.

ENGINEERING.

Professor Gore and Assistant Professor _____, (to be elected.)

This department is well supplied with Surveying and Engineering Instruments and field practice is made an important feature of the course.

UNDER-GRADUATE CLASSES.

DRAWING:

Careful instruction is given in free-hand and mechanical drawing. Each student in this class is required to practice in the drawing-room under the supervision of the instructor three hours a week throughout the session. This work counts one hour per week in the course.

SURVEYING (ELECTIVE).—*Three times weekly during the first term:*

Theory and use of Instruments, Measuring of Land, Laying off and Dividing up of Land, and Platting Surveys.

PROJECTION DRAWING (ELECTIVE).—*Three times weekly during the second term:*

Descriptive Geometry, Orthogonal and Oblique Projections, Projections of Shades and Shadows; Working Drawing of Machines and Detail Drawings.

CIVIL ENGINEERING (ELECTIVE).—*Three times weekly throughout the session:*

The Survey of Roads and Streams, Location of Railroads, Laying out Curves, Leveling, Measurement and Calculation of Earth-work, and all Railroad work up to the point of actual construction.

ARCHITECTURE (SPECIAL COURSE):

A course in Architectural Drawing and Designing is offered for the session 1886–'87, including Specifications and Estimates on Buildings.

SCHOOL OF NORMAL INSTRUCTION.

Hon. Kemp P. Battle, LL. D., President.
Nelson B. Henry, Professor of the Science and Art of Teaching.

The School of Normal Instruction, designed to train teachers for the schools of the State, has been established in accordance with the requirements of the Constitution thereof.

With the consent of the Faculty, pupils in the Normal Course may, without additional cost, enter any classes for which they may be prepared in any of the regular courses.

On completing satisfactorily the course of instruction outlined below, the pupil will receive a certificate attesting this fact, and setting forth the degree of proficiency attained, provided he has passed a satisfactory examination in the following branches: Orthography, Penmanship, Mental Arithmetic, History of the United States and Descriptive Geography. The certificate will also give the pupil credit for any studies which he may have completed in addition to those prescribed in the Teachers' Course.

The degree of Bachelor of Pedagogics (Pe. B.) will be conferred upon such pupils as, in addition to any one of the courses leading to a Bachelor's Degree, complete the course in the Science and Art of Teaching; but the degree will not be conferred upon those pupils who take simply as electives the studies prescribed in the latter course.

TEACHERS' COURSE.

FIRST YEAR.

FIRST TERM.—English (2), Algebra (3), Physiology (3), History (1), Drawing (1), Commercial Arithmetic (1), Reviews and Methods of Teaching (5).

SECOND TERM.—English (2), Algebra (3), Zoology and Botany (3), History (1). Drawing (1), Book-keeping (1). School Economy (5).

SECOND YEAR.

FIRST TERM.—English (1), Algebra (4), Physical Geography (1), Etymology (3), Chemistry (3), or Physics or Latin (4), Graded Schools (3).

SECOND TERM.—English (1), Elocution (1), Physical Geography (1), Geometry (4), Chemistry (3), or Physics or Latin (4), Methods of Culture (2), History of Education (3).

*OUTLINE OF INSTRUCTION IN THE SEVERAL DEPARTMENTS.

SCIENCE AND ART OF TEACHING.

Professor Henry.

REVIEWS AND METHODS OF TEACHING.—*Five recitations weekly during the first term of the first year:*

The elementary branches constitute the course. The various methods of teaching each branch are presented, their relative merits are considered, and that method is recommended which seems to be most in harmony with mental growth, and accords with the experience of the most successful teachers of the day. The methods are illustrated by actual class work, and thus an excellent opportunity is offered for reviewing these branches.

SCHOOL ECONOMY.—*Five recitations weekly during the second term of the first year:*

This course embraces instruction upon the following subjects: The schoolhouse, including its architecture, arrangement, method of ventilating, warming and lighting; the size, arrangement and ornamentation of the grounds; organization of the school; course of study and daily programme; school regulations and enforcement of the same; relations of the teacher, the pupils and the patrons; qualifications of the teacher.

GRADED SCHOOLS.—*Three recitations weekly during the first term of the second year:*

This work is designed to prepare young men especially for the duties of principals of high schools, and superintendents of the city schools. The special features of the course are the organizing and grading of city schools, examinations, promotions, records, reports, institute work, the superintendent and his assistants.

*For the Outline of such studies in the Teachers' Course as do not appear below, see Literary and Scientific Departments.

METHODS OF CULTURE.—*Two recitations weekly during the second term of the second year:*

Lectures on the cultivation of the senses; the nature of perception, memory, imagination, reasoning, the feelings and the will, and the cultivation of each; the natural order of mental development and the consequent order of studies; the temperaments in their relation to school life.

HISTORY OF EDUCATION.—*Three recitations weekly during the second term of the second year:*

Some attention will be given to the historical development of education among the Chinese, Japanese, Hebrews, Greeks and Romans; but stress will be placed upon the progress of modern education in Europe and America.

ETYMOLOGY.—*Three recitations weekly during the first term of the second year:*

In addition to the valuable information gained from it, the study of etymology induces the habit of closely scrutinizing words, and in their use, gives a power of discrimination to be obtained in no other way save by the study of the classics. The principal sources of English words are the Anglo-Saxon, the Latin and the Greek. Careful attention will be given to the most common root-words from these three languages, to the prefixes and suffixes, and to the present use of the word.

ELOCUTION.—*One recitation weekly during the second term of the second year:*

The theory of elocution will be presented by lectures, and class drills will then be given upon such selections as will bring into requisition the exercise of the various attributes and accidents of voice, the different positions and attitudes, gestures, etc.

Text-books last used:—Baldwin's Art of School Management, Raub's School Management, and Methods of Teaching, Compayre's History of Pedagogy, Fenno's Elocution.

COLLEGE OF AGRICULTURE

AND THE

MECHANIC ARTS.

FACULTY.

KEMP P. BATTLE, LL. D.,
President.
FRANCIS P. VENABLE, PH. D., F. C. S.,
Professor of General and Industrial Chemistry.
JOSEPH A. HOLMES, B. AGR.,
Professor of Geology, Botany, and Horticulture.
JOSHUA W. GORE, C. E.,
Professor of Natural Philosophy and Engineering.
WILLIAM B. PHILLIPS, PH. B., PH. D.,
Professor of Agricultural Chemistry and Mining.
GEO. F. ATKINSON, PH. B.,
Assistant Professor of Zoology and Entomology.
----------. ----, (To be elected).
Professor of Military Science and Tactics; Assistant Professor of Engineering.

NOTE.—In the studies of the courses given below, which are not included under the above professorships, instruction is given by the other members of the University Faculty in whose departments these studies respectively belong.

This college is established in connection with the University in obedience to the act of the General Assembly of North Carolina of March, 1867, transferring to the University the Land Scrip granted to the State by Act of Congress of July 2d, 1862, commonly known as the Land Grant Act. By the terms of the last mentioned act the interest of the fund must be inviolably appropriated "to the endowment, support and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and

the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." By the Act of Assembly of March, 1867, the University is to have at least two professorships devoted to the instruction above prescribed.

The Act of Congress does not allow the use of any of the principal or interest of the fund for the erection of workshops, barns or other buildings, or the preparation of land for cultivation, or for the purchase or care of stock; and funds for these purposes have not been placed at the disposal of the University by the State or other parties. Hence the interest of the fund is at present used only for teaching the branches of learning relating to agriculture and the mechanic arts, as commanded by the said act.

In accordance with the provisions of the above mentioned acts of Congress and the General Assembly, courses of study are offered in AGRICULTURE, and ENGINEERING and MINING.

AGRICULTURE.

COURSES OF STUDY.

Two courses are offered: one extending through four years and the other through two years. Students are advised to take the former when possible. The aim in these courses is to furnish thorough instruction in those studies which are related to agriculture in a special way, and at the same time to offer the advantages of a liberal education.

I. FOUR YEARS' COURSE.

This leads to the degree of Bachelor of Science (B. S.) with a Certificate in Agriculture.

The first two years of this course are the same as the corresponding years of the SCIENTIFIC COURSE. See page 20.

THIRD YEAR.

FIRST TERM.—Mechanics (4), Mineralogy (3), Industrial Chemistry (3), Agricultural Botany (3), Entomology (2).

SECOND TERM.—Physics (4), Geology (3), Industrial Chemistry (3), Agricultural Botany (3), Entomology (2).

FOURTH YEAR.

FIRST TERM.—Land Surveying (3), Astronomy (3), Domestic Animals (3), Horticulture (2), Elective (4).

SECOND TERM.—Agricultural Chemistry (3), Horticulture (2), Elective (10).

II. TWO YEARS' COURSE.

This course has been arranged for students who desire to pursue studies relating especially to Agriculture, and who are unable to remain at the University longer than two years. The course leads to no degree, but students completing it, and attaining the proper degree of proficiency in the several studies, will receive a certificate to that effect.

FIRST YEAR.

FIRST TERM.—Algebra (4), Physiology (3), Chemistry (3), Qualitative Laboratory Practice (3), English (2), Entomology (1), Hygiene, six lectures.

SECOND TERM.—Geometry (4), Zoology and Botany (3), Chemistry (3), Qualitative Laboratory Practice (3), English (2), Entomology (1).

SECOND YEAR.

FIRST TERM.—Mechanics (4,) Agricultural Botany (3), Anatomy and Physiology of Domestic Animals (3), Injurious and Beneficial Insects (2), Principles of Horticulture (2), Business Law (1).

SECOND TERM.—Agricultural Chemistry (3), Geology (3), Agricultural Botany (3), Feeding and Breeding of Domestic Animals (3), Injurious and Beneficial Insects (2), Practical Horticulture (2).

CIVIL ENGINEERING AND MINING.

FOUR YEARS' COURSE.

The instruction now offered in this COURSE is designed to furnish students with the theoretical and practical knowledge essential to the professions of Civil Engineering and Mining.

The Course leads to the degree of Bachelor of Science, (B. S.) with a Certificate in Civil Engineering and Mining.

The first two years of the course are the same as the corresponding years of the SCIENTIFIC COURSE. See page 20.

THIRD YEAR.

FIRST TERM.—Physics (4), Mineralogy (3), Calculus (4), Surveying and Drafting (3).

SECOND TERM.—Physics (4), Geology (3), Calculus (4), Surveying and Drafting (3).

FOURTH YEAR.

FIRST TERM.—Engineering (3), Mining and Assaying (3), Quantitative Chemical Analysis (3), Practical Geology (3), Astronomy (3 .

SECOND TERM.—Engineering (3), Metallurgy (3), Quantitative Chemical Analysis (3), Theoretical Mechanics (3), Elective (3).

SCHOOL OF LAW.

Hon. Kemp P. Battle, LL. D., President.
Hon. John Manning, A. M., LL. D., Professor.

This depar.ment contains two classes:

1. A class consisting of students who have no other connection with the classes of the University.

2. A class consisting of such students of other departments of the University as are allowed by the Faculty, in addition to their other studies, to pursue the study of the law.

While particular attention is directed to preparation for obtaining license to practice law in the courts of this State, the student will be invited to pursue a more extended course, and to obtain a broad and liberal knowledge of the law.

Wherever the law of North Carolina differs from that enunciated in the text-books, information is given of such difference and the reason therefor. Lectures are given from time to time on such subjects as have been greatly modified by our statutes, such as Marriage, Descent, Wills, Limitations, Exemptions from Executions, &c.

A Moot Court for the discussion of law questions, and for instruction in the practice of the courts, is regularly held by the Professor.

THE PLAN OF STUDIES comprises: (A) The course prescribed by the Supreme Court of the State for applicants for license to practice. (B) A course of study for those desiring to compete for the d gree of Bachelor of Laws.

Text-books: (A) Blackstone's Commentaries, Washburn on Real Property, Schouler on Executors, Stephen on Pleading, Chitty's Pleading, Adams' Doctrine of Equity, 1st Greenleaf on Evidence, Smith on Contracts, Addison or Bigelow on Torts, Constitution of the United States and of North Carolina, Code of North Carolina, particularly the Code of Civil Procedure. (B) Parsons on Contracts, Pierce on American Railroad Law, Angell & Ames on Corporations, Willard's Equity Jurisprudence, Cooley's Constitutional Limitations, Wharton's Criminal Law, and Best's Principles of Evidence.

To complete the entire course will ordinarily require two years, at the end of which the degree of Bachelor of Laws will be conferred on such students as shall pass an approved examination.

Those joining class (A) during the course, standing an approved examination on the books already read, or their equivalents, will be allowed to compete for this degree.

The advantages offered by this school are: 1. The use of the University and Society libraries, amounting in the aggregate to over twenty-five thousand volumes. 2. The training to be derived from participation in the debates and other exercises of the two literary societies. 3. The opportunity afforded, on easy terms, of attending the lectures of the President and such other lectures as they may desire. 4. Freedom from temptation and the stimulant to study found in the University regulations, and in the atmosphere of study and of books pervading Chapel Hill,

TERMS, PAYABLE IN ADVANCE: For both courses, "A" and "B," $150; for the course "A" for session of forty weeks, $100; for the course "B" for session of forty weeks, $100.

The summer course will begin July first and continue until the last Thursday in August. Two classes, Senior and Junior. Fees for Senior $30.00, for Junior $30.00, for both $50.00.

Students will be received at any time and for any period. In such cases, reasonable deduction of tuition fees will be made.

The sessions and vacations of this department (except those of the summer course) are the same as those of the University.

SPECIAL INSTRUCTION FOR MEDICAL STUDENTS.

Intending students of Medicine can pursue in the University a special course in Chemistry, Physiology, Zoology and Botany.

Those who so desire can also have private instruction in Anatomy, Materia Medica and Pharmacy, from Thomas W. Harris, A. M., M. D., one of the resident physicians of Chapel Hill, and formerly Professor in the University.

DONATIONS TO THE LIBRARIES,

During the Year ending April 1, 1886.

TO THE UNIVERSITY LIBRARY.

By Dr. F. P. Venable,
T. B. Venable,
Hon. W. R. Cox,
Hon. W. L. Saunders,
Prof. W. D. Toy,
A. D. Spring,
Prof. N. H. Winchell,
S. B. Weeks,
Dr. C. W. Dabney,
J. W. Thackston,
G. T. Dippold,
Dr. L. Sauveur,
Hon. Kemp P. Battle,
Woodbury Wheeler,
Miss Margarette Mitchell,
Dr. C. F. Deems,
Miss M. K. Smith,
Dr. Charles Phillips.

By Hon. John J. Knox,
Mass. State Agr. Exp. Station,
Kansas State Agr. College,
Department of the Interior,
Amer. Missionary Association,
Vanderbilt University,
Richmond College,
Peabody Institute,
War Department.
North Carolina College,
Pennsylvania State College,
University Publishing Co.,
Public Library, Cincinnati,
Secretary of Interior,
Smithsonian Institute,
University of Wisconsin,
Department of State.

TO THE DIALECTIC LIBRARY.

By Prof. A. W. Mangum,
Hon. Z. B. Vance,
Rev. A. D. Long,

By Hon. Montford McGehee,
Hon. Kemp P. Battle.

TO THE PHILANTHROPIC LIBRARY.

By Dr. C. W. Dabney, Jr.,
J. H. Hutchins,
Dr. T. B. Crawford,

By Prof. A. W. Mangum,
Mrs. Minerva Tilley,
Hon. Kemp P. Battle.

TO THE LAW LIBRARY.

By Charles R. Thomas,

By State of North Carolina.

CATALOGUE OF STUDENTS.

1885-'86.

POST-GRADUATE STUDENTS.

BATTLE, HERBERT BEMERTON ΦΚΣ Chem. and Agr. ΔΨ Raleigh.
B. S., (Univ. of N. C., '81).

COBLE, ALBERT LUCIEN Law ΔΨ Alamance Co.
A. B., (Univ. of N. C., '81).

FAISON, HENRY ELIAS. Const. Law, Pol. Econ. and Hist. Φ Clinton.
A. B., (Univ. of N. C., '82).

HILL, CHARLES URQUHART ΚΑ Law Φ Washington.
B. S., (Univ. of N. C., '83).

MANGUM, ERNEST PRESTON .. Eng. Lit., Moral Sci. & Hist., Chapel Hill. ΔΨ
A. B., (Univ. of N. C., '85).

POTEAT, ED. M Eng. Lit. and Mod. Lang's Chapel Hill.
A. B., (Wake Forest College, '81).

RIDDLE, CHARLES LUCIEN Law ΔΨ Chatham County.
A. B., (Univ. of N. C., '83).

ROBERTS, JAMES COLE ΑΤΩ Chemistry Φ Newbern.
Ph. B., (Univ. of N. C., '84).

SCULL, ST. LEON Law Φ Harrellsville.
B. S., (Univ. of N. C., '85).

TURRENTINE SAM'L BRYANT .. Eng. Lit., Mor. Sci. & Hist. .. Hillsboro. ΔΨ
A. B., (Univ. of N. C., '84).

WARD, ALFRED DECATUR Law Φ Joford.
Ph. B., (Univ. of N. C., '85).

WEILL, SOLOMON COHEN Law ΔΨ Wilmington.
A. B., (Univ. of N. C., '85).

WHITE, RICHARD STREET Law Φ Bladen.
B. S., (Univ. of N. C., '82).

ΔΨ ... 6 Φ ... 6

FOURTH YEAR STUDENTS—(SENIORS).

BATTLE, LEWIS JUNIUS ΦΚΣ Ph., ... ΔΨ Raleigh.
BYNUM, OLIVER CLEGG ΣΑΕ Cl., ... ΔΨ Bynum's.
CARROLL, WILLIAM HOUSTON ΦΔΘ Cl., ... Φ Magnolia.
CLINE, EDWARD BOST ΦΘΑ Cl., ... ΔΨ Hickory.
COX, PIERRE BAYARD ΚΑ Cl., ... Φ * o Raleigh.
DIXON, FRANK ΚΑ Cl., ... ΔΨ Shelby.

* Resigned 1884.

xo Re-entered 1886

DUNSTON, WALTER SEATON Ph., ... Creswell.
GILMER, ELLISON LINDSAY Ph., ... Greensboro.
GRANDY, CHARLES TAYLOR Ph., ... Shiloh.
GRANDY, LUTHER BELL Ph., ... Oxford.
JACKSON, HERBERT WORTH Ph., ... Asheboro.
JACKSON, SAMUEL SPENCER Cl., ... Pittsboro.
JENKINS, JOSEPH JOHN, JR Cl., ... Riggsbee's Store.
LITTLE, FRANK MILTON Ph., ... Wadesboro.
MANNING, PIERRE BEAUREGARD Cl., ... Sunbury.
MOREHEAD, JOHN MOTLEY Cl., ... Charlotte.
PATRICK, GEORGE LANE Sc., ... Kinston.
PATTERSON, GILBERT BROWN Cl., ... Shoe Heel.
RICE, HENRY WILLIAM Cl., ... Raleigh.
SCHENCK, JOHN FRANK Ph., ... Cleveland Mills.
SELF, WILLIAM AUGUSTUS Cl., ... Newton.
SHIELDS, MALCOM MCGILVARY Cl., ... Carthage.
THOMAS, JAMES Cl., ... Newbern.
UZZELL, KIRBY SMITH Sc., ... Beston.
UZZELL, ROBERT LEE Sc., ... Goldsboro.
WEEKS, STEPHEN BEAUREGARD Cl., ... Elizabeth City.
WILSON, NATHAN HUNT DANIEL, JR Cl., ... Greensboro.
WRIGHT, CLEMENT GILLESPIE Cl., ... Greensboro.

Δ ... 16 Φ ... 12

THIRD YEAR STUDENTS—(JUNIORS).

BAKER, JOSEPH HENRY, JR Cl., ... Tarboro.
BOURNE, LEWIS MILTON Cl., ... Tarboro.
BURWELL, ROBERT TURNBULL Ph., ... Raleigh.
CLEGG, THOMAS DAVID Sc., ... Silk Hope.
CRAIG, BRAXTON Sc., ... Chapel Hill.
DOCKERY, CLAUDIUS Ph., ... Mangum.
GREENE, HERBERT LINWOOD Ph., ... Wilkesboro.
GRISSOM, ROBERT GILLIAM Ph., ... Raleigh.
HACKETT, RICHARD NATHANIEL Ph., ... Wilkesboro.
HESTER, ST. CLAIR Cl., ... Kittrell.
JOHNSON, JACOB COART Ph., ... Johnson's Mills.
LONG, VERNON W Ph., ... Chapel Hill.
MCDONALD, WILLIAM H Cl., ... Raleigh.
MCGEHEE, LUCIUS POLK Cl., ... Raleigh.
MCGUIRE, JAMES, JR Ph., ... Mocksville.
MCIVER, JOHN FENELON Cl., ... Winder.
MCNEILL, WILLIAM HAMILTON Cl., ... Winder.
MORRIS, JOSEPH ALGERNON Cl., ... Wilton.
PARKER, HAYWOOD Cl., ... Enfield.
PERSON, WILLIE MANGUM Ph., ... Franklinton.

* Resigned 1884

PHILBECK, JOSEPH BEATTIE ΦΘΑ Cl., ΔL Newhouse.
RANSOM, HENRY HUNTT Cl., Φ Newbern.
SHAFFNER, HENRY FRIES ΣΑΕ Ph., ΔL Salem.
SIMMONS, ALBERT MARCHANT ΦΔΘ Cl., Φ Fairfield.
SMITH, CLAUDIUS F Cl., Φ Coxville.
STARBUCK, HENRY REUBEN ΣΑΕ Cl., ΔL Winston.
TUCKER, WILLIAM R ΑΤΩ Ph., Φ Raleigh.
WILKINSON, WILLIAM STRONACH ΖΨ Cl., Φ Tarboro.
WILSON, DELONZA TATE ΦΘΑ Cl., ΔL Hobton.

SECOND YEAR STUDENTS—(SOPHOMORES).

ATKINSON, JOHN WILDER ΣΑΕ Cl., ΔL Wilmington.
BATCHELOR, OLIVER DOUGLAS ΦΔΘ Cl., Φ Nashville.
BATTLE, WILLIAM JAMES ΖΨ Cl., ΔL Chapel Hill.
BRASWELL, ARCHIE, JR Sc., Φ Whitaker's.
BRYANT, VICTOR SILAS Ph., ΔL Pineville.
CORNELIUS, WILLIAM HENRY Sc., ΔL Statesville.
COSTNER, ROBERT EDWIN ΚΑ Sc., ΔL Lincolnton.
DAIL, WILLIAM JACKSON BEAUREGARD, Sc., Φ Snow Hill.
DAVIS, HAYNE ΖΨ Cl., ΔL Statesville.
EDWARDS, LUTHER BELL Cl., Φ Henderson.
ESKRIDGE, THOMAS JOSEPH Ph., ΔL Shelby.
EZZELL, ROBERT FREDERICK Ph., Δ Poortith.
GIDNEY, SAMUEL ELEAZAR Cl., Δ Shelby.
GRISSOM, EUGENE, JR Cl., Raleigh.
HARPER, FRANCIS MARION Ph., Φ Kinston.
HEADEN, WILLIAM EDWARDS ΦΔΘ Cl., ΔL Pittsboro.
HEDRICK, JAMES DAWSON Ph., ΔL Wilmington.
HOLT, ROBERT LACY ΑΤΩ Ph., ΔL Graham.
HUGHES, ISAAC WAYNE Cl., Φ Chocowinity.
JOHN, MAXCY LUTHER ΣΑΕ Ph., ΔL Laurinburg.
LEWIS, HENRY WATSON Cl., Φ Lewiston.
LITTLE, WILLIAM MYERS ΣΑΕ Cl., ΔL Little's Mills.
LONDON, HENRY ADOLPHUS ΣΑΕ Sc., ΔL Pittsboro.
MASSEY, CHARLES WESLEY Sc., Φ Durham.
ODELL, OSCAR C ΦΔΑ Cl., ΔL Dallas.
PALMER, MALVERN HILL Ph., Φ Greenback.
PATTON, JOHN WEBSTER Ph., Φ Company Shops.
RINTELS, DAVID WALLACE Ph., ΔL Charlotte.
SHAW, ALEXANDER CLIFTON, ΦΔΘ Ph., ΔL Rockingham.
SLOCUMB, WILLIAM R. K Cl., ΔL Clinton.
SULLIVAN, RUFUS BEAUREGARD ΦΔΑ Ph., ΔL Lincolnton.
THOMAS, FREDERICK DUNCAN Cl., Φ Newbern.
THORP, BENONI Sc., Φ Berea.

WITHERS, EUGENE PERCIVAL ΦΘΑ Ph., Δ Danville, Va.
WILSON, WILLIAM ALBERT ΦΘΑ Cl., Δ Sutherland.

Δ ... 22. Φ ... 12

FIRST YEAR STUDENTS—(FRESHMEN).

ALEXANDER, JOHN WILSON ΣΑΕ Ph., Δ Charlotte.
ANDERSON, JACOB MARCUS Ph., Δ Pleasant Grove.
BORDEN, EDWIN BROWNRIGG ΑΤΩ Ph., Φ Goldsboro.
BORDEN, WALTER EUGENE ΑΤΩ Ph., Φ Goldsboro.
CATES, CALEB GILMER Ph., Δ Rock Spring.
CLEMENT, HERBERT Cl., Δ Mocksville.
COX, JOSEPH BROWN Sc., Δ Tryon City.
CROWELL, JAMES LEE Ph., Δ Bilesville.
CURRIE, DANIEL JOHNSON Cl., Δ Laurinburg.
CURTIS, WALTER MAKEPEACE Ph., Δ Franklinsville.
DEANS, WILLEY BEAUREGARD Ph., Φ Taylor.
EDWARDS, GEORGE WALTER Sc., Δ Elk Creek.
EGERTON, MONTRAVILLE WALKER ΦΘΑ Cl., Δ Hendersonville.
EURE, MILLS ROBERTS Cl., Φ Norfolk, Va.
FAUST, CHARLES GEORGE ΦΘΑ Ph., Δ Columbia Fact'y.
FELTON, CLAUDIUS BELL Cl., Beaufort.
FOSTER, JAMES LEE Ph., Δ Union Ridge.
FOUST, JULIUS ISAAC Ph., Δ Graham.
FUQUAY, ALDRICH Ph., Φ Varina.
GRAHAM, JOHN WOOTEN ΦΘΑ Cl., Δ Keyser.
GULICK, WILLIAM MCKEE ΣΝ Cl., Φ Oxford.
HARRIS, HUNTER LEE Sc., Φ Raleigh.
HARRIS, JAMES ROBERT Cl., Φ Rolesville.
HENDRICKS, JOHN ADDISON Ph., Δ Jerusalem.
HERRING, JOSHUA JAMES, JR Sc., Φ LaGrange.
HILL, JOHN SPRUNT ΣΑΕ Ph., Δ Faison.
HOLLAND, GEORGE COURTS ΦΘΑ Ph., Δ Dallas.
HOWELL, LOGAN DOUGLASS ΣΝ Cl., Φ Goldsboro.
JOHNSTON, HENRY ΦΚΣ Cl., Φ Tarboro.
KELL, BENJAMIN ELMORE Cl., Δ Pineville.
KELL, SAMUEL HICKMAN Cl., Δ Pineville.
LITTLE, LACY LEGRAND ΑΤΩ Cl., Δ Little's Mills.
LONG, JOHN EDGAR Ph., Δ Graham.
LOWE, CICERO FRANKLIN, JR Cl., Δ Lexington.
LYNCH, LEANDER WILLIAM Sc., Δ Cuba.
MAJETTE, MARK Cl., Φ Como.
MARSHALL, JOHN WINGFIELD Cl., Δ Raleigh.
MURPHY, HANSON FINLA Ph., Φ South Washington.
NIXON, BREVARD Cl., Δ Lowesville.
PARKER, FRANCIS MARION, JR ΦΚΣ Ph., Φ Enfield.

PARKER, JUNIUS REVERDY Ph., ... Graham.
PARTRICK, WILLIE SULLIVAN Cl., ... Clinton.
RICKS, WILLIAM BENJAMIN Cl., ... Nashville.
ROBERSON, WILLIAM STONE Cl., ... Chapel Hill.
SAUNDERS, NORFLEET SMITH Sc,, ... Pactolus.
SMITH, WILLIE HENRY Cl., ... Reidsville.
STRONACH, ALEXANDER Ph., ... Raleigh.
STROWD, THOMAS WILSON Ph., ... Chapel Hill.
TOMS, CLINTON WHITE Ph., ... Hertford.
TYSON, BENJAMIN FRANKLIN Cl., ... Greenville.
WHITE, WALTER WALLACE Ph., ... Boykin's, Va.
WILLS, GEORGE STOCKTON Ph., ... Yadkin College.
WOOD, HENRY GILLIAM Ph., ... Edenton.

OPTIONAL STUDENTS.

ATKINSON, WADE HAMPTON 2d year Selma.
BENSON, JAMES WILLIAM 1st year Beasley Hill.
BETHELL, GEORGE WASHINGTON 1st year Danville, Va.
BRIGHT, WILLIAM RANSOM 2d year Chocowinity.
CARRAWAY, DAVIS STEPHENS 1st year Newbern.
COPELAND, ROBERT ERNEST 1st year Wilson.
COX, BERIAH THADDEUS 2d year Coxville.
DAVIS, JAMES E. B 1st year Pikeville.
EDMONSON, WILLIAM ELAM 2d year Morganton.
ENGELHARD, JOHN COTTON 2d year Raleigh.
ERWIN, JOSEPH ERNEST 2d year Morganton.
GATTIS, ROBERT LEE 2d year Belle Voir.
GIDNEY, CHARLES CHANCEY 2d year Shelby.
GREENLEE, ROBERT LEE 3d year Greenlee.
HARRINGTON, ALONZO LLEWELLYN 1st year Ayden.
HORD, GEORGE JACOB V. B 2d year Shelby.
MANNING, ISAAC HALL 4th year Chapel Hill.
MCKINNON, GRAHAM 2d year Plain View.
NEWTON, REV. C. C 2d year Chapel Hill.
NORCOM, FREDERICK HOSKIN 1st year Clarkton.
PERRY, DAVID BARLOW 1st year Tarboro.
REID, GEORGE PINKNEY 1st year Cuba.
RICHARDSON, ALFRED SMITH 2d year Whiteville.
SOUTHERLAND, CLAUDIUS BONNER 1st year Wilmington.
STEELE, GEORGE SPENCER 2d year Rockingham.
STOWE, SAMUEL TATE 1st year Lodo.
STRICKLAND, MELVILLE C 1st year Bliss.
SUTTON, KIRBY EDWARD 1st year LaGrange.
TALTON, WILLIAM RANSOM 1st year Selma.

Taylor, George David	1st year	Dysortville.
Tripp, John Bryant	1st year	Greenville.
Wade, Thomas	3d year	Rich Square.
Waldrop, Otis Theron	1st year	Mill's Springs.
Woodley, Daniel Edgar	2d year	Creswell.
Woodson, Robert Scott	1st year	Plymouth.
Worthington, Robert	1st year	Greenville.

STUDENTS IN LAW.

Alexander, Edmund	Plymouth.
Barden, Jefferson Davis	Wilson.
Coble, Albert Lucien	Alamance Co.
Cooper, Robert Lee	Murphy.
Daniels, Josephus	Wilson.
Hill, Charles Urquhart	Washington.
Hines, Joel	Pender County.
Hooker, Joseph John	Chatham Co.
Johnson, Claud Raymond	Lewiston.
Reece, Darett Manly	Booneville.
Reece, Winston Lewellin	Booneville.
Riddle, Charles Lucien	Chatham Co.
Scull, St. Leon	Harrellsville.
Ward, Alfred Decatur	Joford.
Weill, Solomon Cohen	Wilmington.
White, Richard Street	Elizabethton.
Woodard, Sidney Albert	Black Creek.

STUDENTS IN MEDICINE AND PHARMACY.

Benson, James William	Beasley Hill.
Stowe, Samuel Tate	Lodo.

SUMMARY.

Post-Graduate Students	13
Fourth Year Students	28
Third Year Students	29
Second Year Students	35
First Year Students	53
Optional Students	36
Law Students	17
Students in Medicine and Pharmacy	2
	213
Names counted twice	9
Total	204

DEGREES CONFERRED IN COURSE, JUNE, 1885.

BACHELORS OF ARTS, (A. B.)

BUTLER, MARION Huntley.
ELLER, ADOLPHUS HILL Mouth of Buffalo.
FAUST, EDWIN MICHAEL Columbia Factory.
FIELD, ALEXANDER JONES Ridgeway.
LONG, AUGUSTUS WHITE Chapel Hill.
MANGUM, ERNEST PRESTON Chapel Hill.
MANN, JULIAN SMITH Middleton.
MCIVER, BERRIE CHANDLER Sanford.
MONROE, JAMES RANDLETT Fayetteville.
RIDDICK, WALLACE CARL Raleigh.
WEILL, SOLOMON COHEN Wilmington.

BACHELORS OF PHILOSOPHY, (PH. B.)

GOODMAN, ERASTUS GENAIR Town Creek.
HILL, ATHERTON BARNES Scotland Neck.
HOWARD, GEORGE, JR Tarboro.
JACKSON, MAX Fayetteville.
LATHAM, HEBER AMOS Greenville.
NEAL, RICHARD SMITH Scotland Neck.
WARD, ALFRED DECATUR Joford.
WEST, JESSE FELIX Waverly, Va.

BACHELORS OF SCIENCE, (B. S.)

BRYAN, JAMES ALEXANDER Spartanburg, S. C.
NORRIS, WALTER LEE Apex.
SCULL, ST. LEON Harrellsville.

HONORS, 1884–'85.

VALEDICTORY ORATION.

WEILL, SOLOMON COHEN Wilmington.

CLASSICAL ORATION.

MCIVER, BERRIE CHANDLER Sanford.

PHILOSOPHICAL ORATION.

WARD, ALFRED DECATUR Joford.

GREEK MEDALS.

MCGEHEE, LUCIUS POLK, (Scholarship) Raleigh.
SIMMONS, ALBERT MARCHANT, (Improvement) Fairfield.

PHILLIPS' MATHEMATICAL PRIZE.

MCGEHEE, LUCIUS POLK Raleigh.

WORTH PRIZE.

WARD, ALFRED DECATUR Joford.

CHEMISTRY MEDAL.

JACKSON, MAX Fayetteville.

LATIN PRIZE.

MCGEHEE, LUCIUS POLK Raleigh.

REPRESENTATIVE MEDAL.

THOMAS, JAMES Newbern.

MANGUM MEDAL.

WEILL, SOLOMON COHEN Wilmington.

* Resigned 1884

INDEX.

PAGE.

Agriculture, College of 49
Assaying 38
Blow-piping 37
Board of Trustees 3
Botany 40
Business Law 25
Calendar 2
Chemistry, Agricultural 37
" Analytical 36
" General 35
" Industrial 35
Committee of Visitation 6
Constitutional and Inter. Law 25
Courses of study, Undergraduate, 18
" Optional 21
Deems' Fund 14
Degrees 23
" conferred June 1885 62
Discipline 9
Donations to Libraries 55
Elisha Mitchell Society 11
Engineering 45, 51
English 30
Entomology 42
Examinations 10
" for Entrance 16
Executive Committee 6
Expenses 15
Faculty and Officers 7
French 31
Geology 39
German 32
Greek 29
Honors, conferred June, 1885 63
Latin 28
Law, School of 52

PAGE.

Lectures, University 11
Libraries 11
Literary Department 25
" Societies 10
Magazine, University 12
Mathematics 34
Matriculation 16
Mechanic Arts, College of 49
Medals 13
Medical Students, special instruction for 54
Metallurgy 38
Mineralogy 37
Mining 38, 51
Moore Scholarships 14
Moral Philosophy 26
Museum, Industrial 36
Museums 12
Natural Philosophy 44
Normal Instruction, School of 46
Political Economy 25
Post-graduate Courses 22
Prizes 13
Reading Room 11
Religious Services 12
Reports 10
Scientific Department 34
Session, Beginning of 16
Smith Fund 14
Special Certificates 23
State Students 15
Students, Catalogue of 57
Teaching, Science and Art of 46
Young Men's Christian Asso 12
Zoology 42